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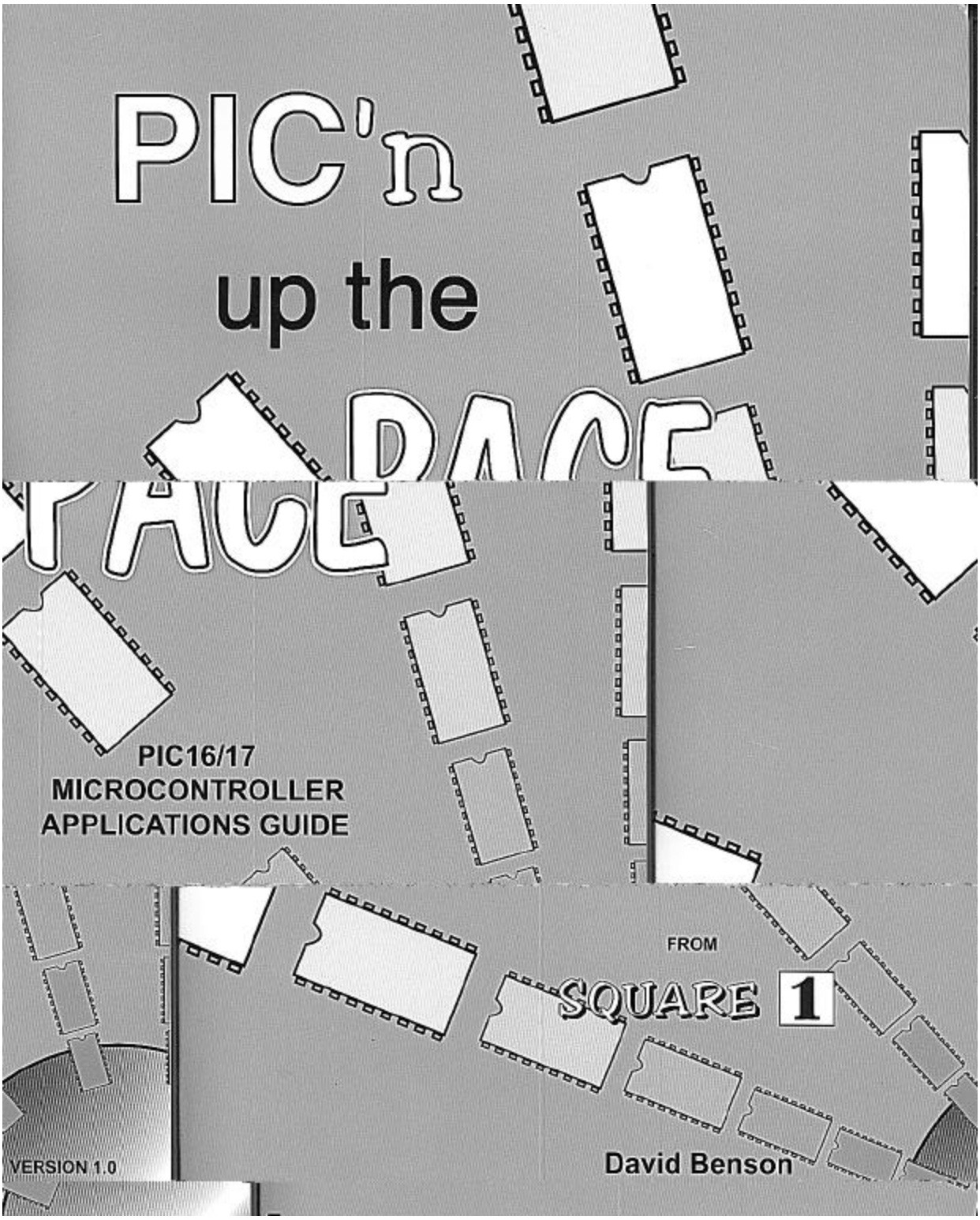

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PIC16/17 MICROCONTROLLER APPLICATIONS GUIDE FROM

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INTRODUCTION

"PIC'n Up The Pace" begins where **"Easy PIC'n"** ends. I am assuming you know all the beginner information included in **"Easy PIC'n"** either from using the book or from other experience. There will be very little overlap.

The programs included in this book are examples to help you learn. My hope is that you will study the examples in this book and write your own borrowing from what you see here. That way, you will know what's in your code because you created it. If you want to borrow from the code in this book, it is currently available for downloading at the Square 1 website (no charge) or on disk.

Include files are not used in this book because if you use someone else's include file (this includes those provided by Microchip), you won't know precisely what's in it and will spend a lot of time scratching your head because your program isn't working because you didn't pay attention to what the author of the include file had in mind.

If you write the code, you know what's in it and what it does.

Use of macros and most assembler directives is avoided because they confuse people who are learning more often than not. If you end up doing a lot of "PIC'n", you may find them useful.

Reluctantly, I have chosen to use file register bank switching rather than use the TRIS and OPTION instructions for the majority of examples in this book. This will prepare you for situations where things can't be done otherwise plus it will foster understanding of other's code such as the examples in Microchip's "Embedded Control Handbook".

Destination designator equates are used in **Easy PIC'n"** because the version(s) of MPASM(tm) available at the time it was written would not accept "w" and "f". The version of MPASM contained in MPLAB(tm) will accept "w" and "f", so destination designator equates are not included in the program listings in this book. If the version of MPASM you use requires them, you can easily add them.

I think you will particularly enjoy the serial LCD module project. It can be incorporated in your future projects and can use used as test equipment to troubleshoot your own PIC16 applications as you develop them. It can provide a "window" into what is happening as a PIC16 program is executed and a way to display results. It can take the place of the LED's used in the examples in this book. When you create your own applications, those pins will be busy controlling your widget instead of LED's and won't be available for display purposes. With the serial LCD module, 1 pin = 1 wire will allow you to display whatever your choose.

Where programs used previously in the book are combined for use in a more exotic application, I did not rewrite the code to achieve double duty (shared) use of file registers. This is particularly true in the LCD chapter.

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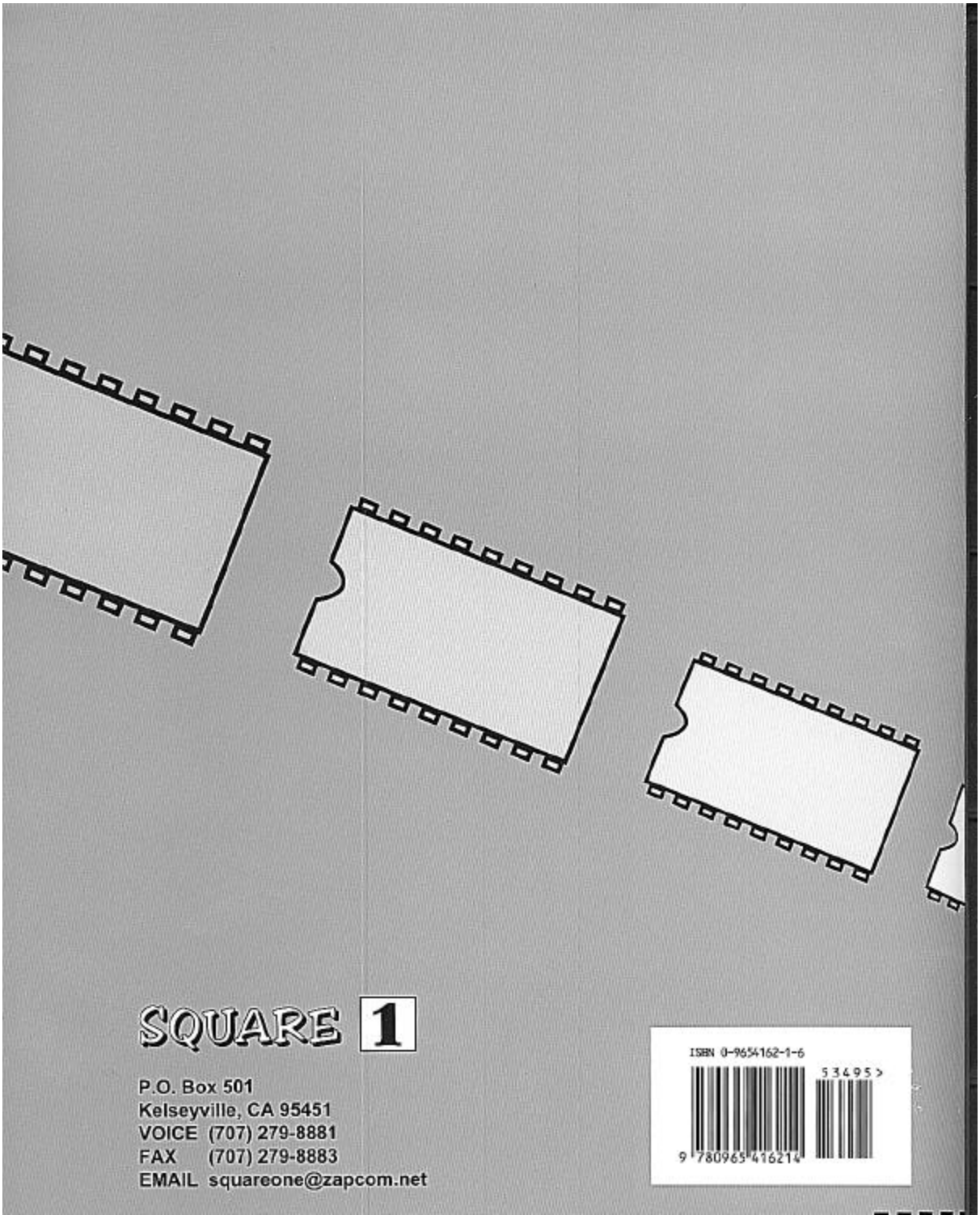

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